

INDONESIA VOCATIONAL EDUCATION PRAXIS BETWEEN MAZAB JOHN DEWEY AND CHARLES PROSSER

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Abstract

The purpose of writing this paper is to examine the influence of the philosophy and theory of two key figures of vocational education in the world namely John Dewey and Charles Prosser to the praxis of vocational education in Indonesia. Praxis vocational education in Indonesia tend to use philosophical essentialism that drives social efficiency. The main feature is the separation between vocational education with academic education. Praxis of vocational education in Indonesia is more strongly influenced by the ideas and theories of Charles Prosser. Structuring the content of the program, school infrastructure standards, process standards, assessment standards, strengthening cooperation, industrial work practices programs, coaching educators, all of which lead to the fulfillment of labor standards in the industries, continue to equip schools with the tools and machines such as those used in industries.

Keywords: vocational education, esensialism, pragmatism, Dewey, Prosser

1. Introduction

Indonesian vocational education development has gone through a long history. Since the preindependence period, the time of independence, the old order, new order, order reform. Development of vocational education Indonesia continue to proceed to make improvements container and contents "cucupu lan manik". Indonesian vocational education requires harmony between container and contents . The concept of harmony between the container and the contents of "cucupu lan manik" make something dynamically evolving. In the process of finding and perfecting form and content, the development of vocational education requires a conceptual framework that is appropriate and in accordance with the identity and philosophy of life of the Indonesian nation. The emergence of myriad phenomena as a result of globalization make the nations of the world continue to make updates and adjustments to the direction and orientation of vocational education. Myriad phenomenon illustrates the phenomenon of insect movement that beautiful but

unpredictable, dynamic, free, open, uncertain, always changing rapidly. Therefore it is necessary vocational education development platform that is not only responsive but should be progressive .

In order not to miss moreover lost its way, vocational education forum in Indonesia, many activities held discussions about the best form of vocational education and vocational us. The central roles of what is right is run by Indonesian vocational education through formal, non-formal, and informal? What are the goals, objectives, and benefits of future vocational and vocational education for Indonesia? What strategies are chosen and how to implement it as a surefire strategy to achieve the goal of which is a series of questions to be answered.

Indonesian vocational education must grow from the identity and culture of his own people. The application of science and technology in supporting the growth of vocational education in Indonesia must continue to pay attention to the philosophy of the nation, the moral aspects, national culture, environment, tradition-art, populist

economic vision, social relations. Education is a true vocational education has unique characteristics and specific to a nation. The successful development of vocational education framework in other countries is not necessarily suitable to be adopted and adapted in Indonesia. Because the fundamentals of life philosophy of the Indonesian nation, practical work and social life is not the same as other nations. Social order and culture of Indonesia has been there and grow with different identities of other nations. Indonesia has a rich social capital and unique. The cultural diversity of Indonesia is an enormous social capital value and meaning for the development of vocational education.

Objectives of vocational education is very diverse and broad [1,10]. Organization of vocational education is very attached to the child's developmental needs of the nation and the visionmission of building a nation. Billet (2011) identified at least four objectives of the vocational education:

(i) the preparation for working life including informing individuals about their selection of an occupation; (ii) the initial preparation of individuals for working life, including developing the capacities to practise their selected occupations; (iii) the ongoing development of individuals throughout their working life as the requirements for performance of work transform over time; and (iv) provisions of educational experiences supporting transitions from one occupation to another as individuals either elect or are forced to change occupations across their working lives (Billet, 2011: 5).

Vocational education was held in preparation for students entering working life [4]; choosing a job, develop capacity, high skill jobs that have been [10, 8, 9] ; continuously develop problem-solving skills through working life [6], supplies educational experience to support a variety of possible transitions from one job to another; creating their own jobs as new

entrepreneurs [6]. Vocational education concerned with the education and training efforts to assist learners in identifying suitable job for his career, fun, productive, and contribute positively both to the employer and to himself as a worker.

Vocational education in Indonesia is expected to meet the objectives: (1) preparation of competent manpower in certain occupations as supporting industrial development and production services; (2) reduction of unemployment and poverty; (3) an increase in local revenues; (4) equitable development; (5) the withdrawal of foreign investment; (6) improvement of social status. Besides vocational education is also directed to increase the capacity of the nation so that the child has the skill careers in various fields of work as part of a skill or skill through life (life skills).

Vocational education can also provide social security and poverty reduction if accompanied by job creation widest in many areas. As a supporter of economic development, the development of vocational education is very relevant and need to look at the Master Plan for the Acceleration and Expansion of Indonesian Economic Development (MP3EI) as the master plan the transformation of economic development activities in Indonesia. MP3EI designing high economic development, balanced, equitable, sustainable, and highly competitive. In later discovered MP3EI economic corridor development concept aims to attract investment and boost economic activity through the growth of leading sectors in certain regions known as economic corridors. Economic corridor development approach is also expected to make an impact spill over to encourage more rapid growth in the surrounding areas and ensure the realization of sustainable development.

Confirmation of the role of Technology and Vocational Education in guarding the vocational education in Indonesia to Indonesian gold requires a comprehensive

conceptual framework, good, true, and relevant to the development of the vision and mission of the Indonesian nation. How to build the scientific Technology and Vocational Education of Indonesia as part of the development of vocational education and the development of the nation is interesting to study. Philosophical views, two of the leading philosophers of vocational education in the world is John Dewey and Charles Prosser need to be studied. Because the thought of John Dewey and Charles Prosser colored the basics of thought and praxis reform of vocational education. Vocational schools should be educating and increasing relevance to the reality of the economic and social needs, even the needs of culture, environment, health, science, politics , and ideology of the nation. Although the two figures both agreed to increase the relevance of vocational education to the economic and social needs, but both have a different view of it [10, 2].

Prosser widely known as the father of vocational education world with sixteen theorem. Prosser looked vocational education in vocational schools should be organized as an industrial society and must always learn from the industries. According Rojewski (2009:20) Prosser view more towards social efficiency, rather than to meet the individual needs of the community, but to meet the needs of a country's workforce. Bastion of vocational education for social efficiency is the preparation of well-educated - trained workforce that is always subject to the works developed by the employer. Thus developing the concept of competence-based education , competence-based training, competence-based curriculum, competence-based learning, the link-and-machth, demand-driven, competency certification , licensing work and so on. In the view of Prosser, vocational schools said to be effective only if the vocational school can show the same school climate by working climate in the industry, and alumni of the user satisfied with the results and achievements of

education, ready to print a skilled workforce to meet the needs of work in the industry.

In contrast to the views of Prosser, Dewey believed that the basic purpose of vocational education is to meet the needs of individuals and preparation through life. How do students learn to solve problems of life with different ways according to each condition. Dewey offers a democratic model of vocational education where students have the freedom to develop intellectual abilities and the opportunity to develop competence in working in the industries. Dewey rejected the impression that learners are individuals who passively controlled by the pressure of the market economy and the capacity in which the existence of intellectual forbidden [10]. In countries that have experienced advances in science and technology tend to develop vocational education toward Dewey thought. Vocational education in the developed countries does not stop at the demand-driven but it is up to the market driven. Vocational education aims to build on the market or the labor market with a high ability to innovate in the development of new technologies. The concept of vocational education development towards a knowledge-based industry.

Both mazab can be used as a basis for the development and enhancement of the role of vocational education to meet the Indonesian gold. What are the effects of both these mazab in the formulation of the definition and purpose of vocational education in Indonesia, particularly in the content standards, competency standards, standards of facilities and infrastructure, standards educators, vocational education management standards. Similarly, the effects on the structuring and development of curriculum and learning in vocational education in Indonesia. This paper discusses vocational and vocational education praxis Indonesia from a philosophical aspect, juridical, theoretical, and practical.

2. Philosophical Aspects of Vocational Education

The early development of vocational education throughout the world is based on the philosophy of essentialism in which the vocational education aims to meet the needs of the labor market. Essentialism philosophy which emphasizes that vocational education should function and relevant to the diverse needs of both learners needs, family needs, and the needs of the various sectors and sub-sectors of national development. Alignment relations (link & match) between vocational education in Vocational Hight School (VHS) and Academies, Polytechnic, Colleges, Institutes, and Universities should closely with development needs [11].

The philosophy of existentialism believes that education should nurture and develop the existing learners optimally implemented through the provision of facilities and dignity through education, pro-change (creative, innovative and experimental), grow and develop their talents, interests, and abilities of learners [11]. Organization of vocational education in VHS, Academy, Polytechnic, Colleges, Institutes, and Universities should pay attention to differences in intelligence, skill, talents and interests of learners. Learners should be treated maximally to actualize the potential for intellectual, emotional, spiritual, *estetikal*, and *kinestetikal*. The students are a valuable asset of the nation and is one of the world competitiveness factors are strong, which is potentially capable of responding to the challenges of globalization [11].

The main feature of this philosophy is the separation between vocational education with academic education. Vocational education curriculum are organized in a sequential, instructors require extensive experience in the working world and closely related to the industry [10]. Basic essence of

vocational education in the perspective of the philosophy of essentialism and existentialism is to educate human worth, meaning for life, competent, emphasizing the role and function of the educator or trainer in the learning process, educators are the experts who mastered the subject matter and skills, learners are able to develop skills through training, repetition until obtaining a high skill, conditioning work in conditions resembling the workplace, and the development of learners' work behavior habits, discipline, target-based work, time, quality work. Learning performed progressively from less complex skills to more complex skills [12].

Later vocational education increasingly influenced by the philosophy of pragmatism. Key feature of the philosophy of pragmatism is the emphasis on problem solving and higher order thinking, learning is constructed from previous knowledge. Require higher order thinking skills of critical thinking, creativity, communication skills, and collaboration capabilities. The purpose of education is to meet the needs of individuals and himself skilled through life (life skills) and carrier skill. Wagner (2008:14) states to enter the "new world of work" in the 21st century required seven survival skills are: (1) critical thinking and problem solving; (2) collaboration across networks and leading by influence; (3) agility and adaptability; (4) initiative and entrepreneurialism; (5) effective oral and written communication; (6) Accessing and analyzing information; and (7) curiosity and imagination.

Pragmatism is a philosophy of action, questioned how practical consequences of vocational education for human life. Relation to vocational education, pragmatism requires the division of theoretical and practical issues. Development theory gives stock of knowledge, ethics, and normative, while preparing for professional practice in accordance with the needs of the community. The proportion theoretical and practical

vocational training is important in order not to give birth to materialism disguised as too poor emphasis on theory and practical philosophy. Also can not ignore the practical needs of the community, because if that were the case means that education can be said dysfunction [12].

Thought Prosser tends to flow into the philosophy of essentialism, while Dewey thought, tend to get in the flow of the philosophy of pragmatism. Pragmatism in recent years been identified as the most vocational education philosophy major [7]. Vocational education to prepare participants pragmatically solve real problems in a logical and rational, open seek and find alternative solutions and ready to experiment. The expected outcome of a pragmatic education is vocational knowledge society that is able to adapt, self-sufficient, participate in a democratic society, and believes that learning and action is a long process [10].

According Sudira (2012) pragmatism searching for appropriate action to be executed in the right situation anyway. Miller stated vocational educators will be successful if it is able to practice and maintain the principles of pragmatism as a basic reference and educational practices in the workplace (workplace education). Pragmatism states that among educators and learners together to do the learning process [5, 2], emphasizes the reality or real-world situations, contexts and experiences become a very important part. Educators have a progressive attitude and rich in new ideas.

Pragmatists are humans capable of acting empirical, not mired in ideological quarrels barren without content, but obviously trying to solve the problems faced by concrete action. According Tilaar (2002:184) pragmatism see the value of knowledge is determined by its usefulness in practice. Therefore, for the pragmatic theory is only a means to act, not to make a man shackled and stagnates in the theory itself. Exact theory is a theory useful, ready-made,

and in fact valid and allows humans to act practically. Truth of a theory, idea or belief is not based on abstract proof, but based on experience, the practical consequences, and the usefulness and the satisfaction it brings. In short, he was able to direct people to fact or reality that is expressed in the theory [12].

3. Vocational Education Mazab Charles Prosser

Basic principles of the organization of vocational education laid by Charles Prosser in 1925 as a vocational education theory most widely used. Prosser theory known as "PROSSER'S SIXTEEN theorems". It holds 16 major issues in the implementation of vocational education as the education workforce. Prosser is the figure most influential vocational education in the United States. The 16 theories is as follows:

- 1) Vocational education will be efficient in proportion as the environment in which the learner is trained is a replica of the environment in which he must subsequently work (work environment).
- 2) Effective vocational training can only be given where the training jobs are carried on in the same way, with the same operations, the same tools, and the same machines as in the occupation itself.
- 3) Vocational education will be effective in proportion as it trains the individual directly and specifically in the thinking habits and the manipulative habits required in the occupation itself (work habits).
- 4) Vocational education will be effective in proportion as it enables each individual to capitalize on his interests, aptitudes, and intrinsic intelligence to the highest degree (individual need).
- 5) Effective vocational education for any profession, trade, occupation, or job can

only be given to the selected group of individuals who need it, want it, and are able to profit by it (elective).

- 6) Vocational training will be effective in proportion as the specific training experiences for forming right habits of doing and thinking are repeated to the point that these habits become fixed to the degree necessary for gainful employment (gainful employment).
- 7) Vocational education will be effective in proportion as the instructor has had successful experiences in the application of skills and knowledge to the operations and processes he undertakes to teach (crafts person teacher).
- 8) For every occupation there is a minimum of productive ability which an individual must possess in order to secure or retain employment in that occupation (performance standards).
- 9) Vocational education must recognize conditions as they are and must train individuals to meet the demands of the "market" even though it may be true that more efficient ways for conducting the occupation may be known and better working conditions are highly desirable (industry needs).
- 10) The effective establishment of process habits in any learner will be secured in proportion as the training is given on actual jobs and not on exercises or pseudo jobs (actual jobs).
- 11) The only reliable source of content for specific training in an occupation is in the experiences of masters of that occupation (content from occupation).
- 12) For every occupation there is a body of content which is peculiar to that occupation and which practically has no functioning value in any other occupation (specific job training).
- 13) Vocational education will render efficient social services in proportion as

it meets the specific training needs of any group at the time that they need it and in such a way that they can most effectively profit by the instruction (group needs).

- 14) Vocational education will be socially efficient in proportion as in its methods of instruction and its personal relations with learners it takes into consideration the particular characteristics of any particular group which it serves.
- 15) The administration of vocational education will be efficient in proportion as it is elastic and fluid rather than rigid and standardized.
- 16) While every reasonable effort should be made to reduce per capita cost, there is a minimum level below which effective vocational education cannot be given, and if the course does not permit this minimum of per capita cost, vocational education should not be attempted.

Prosser theory very powerful influence on vocational education and training in the various countries. Taiwan uses simulation system, which was built in the workshop working practices such as vocational schools or equal to pasilitas industry. The second with on-the-job training where work well for teaching. Likewise, the German dual system that uses, TAFE in Australia apply the workplace-learning for vocational education closer to the world of work.

4. Vocational Education Mazab John Dewey

Vocational education in mazab John Dewey, putting vocational education to prepare students as capable of solving the problems due to changes in ways of logic and reason with an open mind in finding various alternative solutions, ready to perform a variety of experiments. The impact of education in Dewey mazab is knowledgeable citizens who are able to adapt and meet the vocational himself in the midst berpartisipasi democratic society, have the insight to learn

and act to change as a process of lifelong learning [10]. Dewey also offers the view that vocational education should provide the solutions the problem of discrimination in hiring labor, the rigidity of women, minorities, the backward and the poor.

Dewey advocated modernization of vocational education curriculum to include the study

"scientific-technical". Dewey argued that traditional schooling has become dull and mechanistic. As a progressive educator must make changes to the curriculum and learning that reflects real changes in technology in the new century. In a democratic education, learners explore her capacity to participate fully in community life. Dewey saw schools that are isolated from community life full of waste. Dewey's view that schools should be able to perform the transmission and transformation of culture with increasing loss of position differences of race, ethnicity, and socio-economic position. Each individual learners are expected to have a positive outlook to help each other.

Vocational education is not exclusively focus only on how to enter the workforce but rather the provision of career development opportunities, adaptive to any changes in the workplace, based on knowledge. Vocational education curriculum in Dewey's view must contain a broad academic ability or general competence, technical skills, interpersonal skills, and character. The issue of vocational education curriculum there are three, namely: (1) integration of academic education, career, and technical; (2) absence of articulation between primary, secondary, and higher; (3) the close relationship between the school/college to the world of work [10].

The best school is the school that is able to create a social community that invites all citizens develop a culture of community members. According to Dewey only true and authentic experiences that enable learners to develop theories through a process of linking

a wide range of event or occurrence. Learners together educators should undertake joint research efforts and make the process of reflective thinking. According to Dow (2002), Dewey proposed semi vocational approach, the confidence of all learners need to develop industrial intelligence in order to participate fully and freely in the midst of the flow of industrial democracy.

5. Yuridical Formal Indonesia Vocational Education

Legally the definition of basic vocational education can be found in Indonesian Law System of National Education (Education) number 20 of 2003. Article 15 states secondary vocational education is an education that prepares students primarily for work in a particular field. Vocational education is higher education that prepares learners to have a job with a particular expertise applied the maximum equivalent degree program. Vocational education held at the Vocational School. Vocational education was held in the Academy, High School, Polytechnic, Institute, and the University. This article confirms that vocational education is the primary education to prepare students for work.

Later on Government Regulation No. 19 of 2005, article 19 of the National Education Standards (NES), stated that the Competency Standards (SKL) vocational education unit is to increase the intelligence, knowledge, personality, *ahklak* noble, as well as the skills to live independently and participate in education further according to the vocational field. SKL contains four main aspects, namely: (1) increasing intelligence and knowledge as part of the educational aspect of the brain; (2) its personality and noble character as a personification of educational conscience; (3) possesses the skills to be able to feed herself independently; (4) can be studied further appropriate vocational fields that have been taken.

Re-affirmed the definition of vocational education in government regulation (PP) 17

of 2010 on the Management and Operation of Education stating that the Vocational School, hereinafter abbreviated as SMK, is a form of formal education unit which organizes vocational education in secondary education as a continuation of the SMP, MTS, or equivalent or other form of advanced learning outcomes are the same or equivalent recognized junior or junior. District/city governments to ensure the implementation of special education and general education units vocational education units in accordance with the needs of learners. Article 157, paragraph 2 states the basic and secondary education units are developed based on local comparative advantages should be enriched with the charge of vocational education related to the potential economic, social, and local culture is a competitive advantage and comparative area.

The definition and purpose of vocational education in the Law no. 20 of 2003 is more impressive effect mazab Prosser with its philosophy of essentialism. While in Law 19 of 2005 description of competence standards SMK stronger shows the influence of the philosophy of pragmatism mazab Dewey. Observing the laws existing formal vocational education, yet actually confirms the direction and identity of Indonesian vocational education in the development of Indonesian human resources in the future.

Legally formal vocational education in Indonesia was held at SMK and MAK . In line with the implementation of regional autonomy development of vocational education in SMK and MAK organized by district/city governments to pay attention to the local potential advantages both in economic, social, and cultural areas. Terms of educational autonomy law turned out had repercussions that uneven regional capacity and capability in developing vocational education. Likewise equalization vocational education programs with economic development corridors not well ordered. Each of these districts and cities in Indonesia

does not have the same capacity to undertake the development of vocational education. As a result, the growth of vocational education in Indonesia will be uneven, a gap between the quality of vocational schools across the country. Local governments have not been able to understand the position and function of vocational education well . Objectives of vocational education is to alleviate poverty, increase in local revenues, peningkatkan quality workforce, increased prosperity, strengthening and conservation of culture and values.

6. Praxis Vocational Education Indonesia

Praxis vocational education in Indonesia is likely to be influenced by mazab Prosser. Indonesian education system divide in *kejuruan* education and vocational education separately with academic education. Middle-level vocational education held at SMK/MAK and vocational education was held in the Academy, High School, Polytechnic, Institute, University. While mid-level academic education held in SMA/MA and a high level of academic education was held at the

University / Institute / College / Academy. Separation of vocational education and vocational with academic education is a key feature of essentialism philosophy of education with the flow.

Prosser theory is still very powerful influence on vocational education practices in Indonesia. Vocational schools and vocational campus developed curriculum based on competencies extracted from work competencies in the industries. Learning and training used the tools likely industry equipment. Skill development training activities require a high cost for energy, lab materials, and lab equipment.

Fostering the development of vocational education in SMK by the Directorate of Vocational (DIT PSMK) also shows the strong influence of mazab Prosser. Structuring the program content standards, school infrastructure standards, process standards, assessment standards, strengthening

cooperation, industrial work practices program, coaching educators all leads to the fulfillment of labor standards in the industry, leading the industry to continue to equip replica tools and machines such as those used in the industry. Implementation of learning theory and practice also leads to specific knowledge, functional, reproductive skill development, skilled physically as work preparation.

The structure of vocational education curriculum before the year 2013, a familiar grouping normative programs, adaptive, and productive. Indeed this implies a pragmatic grouping where vocational education should always be adaptive to changes. Normatively, all graduates have the competence, morality, and a good attitude. Unfortunately, this grouping is defined as a group of teachers in acquiring plots teaching hours after enactment load a certified teacher.

Vocational education as an education for the world of work is very important function and position in meeting the objectives of employment policies. Employment policies of a country are expected to cover four main topics: (1) provide employment opportunities for all labor force need;

(2) provided a balanced and equitable work in every area and region; (3) provide adequate income in accordance with the feasibility of living in society; (4) education and training is able to fully develop all the potential and future of each individual; (5) matching men and jobs with minimum losses , high income and productive. Employment policy should not favor only on a group or a part of the community. The number and types of jobs available, spread evenly, balanced, and well worth for the entire life of the community. Vocational education and vocational become inefficient if no jobs available for graduates and balanced evenly.

To realize a good vocational education needed vocationalization process. Vocationalization main purpose is to improve the relevance of education and vocational guidance with the development

needs of the world of work in creating a competitive and prosperous society oriented to sustainable development. Vocationalization should not be stuck only on the orientation of a narrow market. Vocationalization must build a prosperous society today and the future indefinitely. Vocationalization also carries the vision and mission of establishing and maintaining of the universe and all its contents be "*hamemayu ayuning bhawana*". World is already "pretty" either repaired or re-added continuously so good. Vocationalization should not be stuck in a narrow instantaneous needs let alone threaten survival. It is the moral message to society through vocational education.

Vocational education is not merely to obtain pleasure, ease, comfort, safety while, but for a more distant goal is a happy and peaceful living together on this planet. Besides seeking preparation to become increasingly literate society, becoming productive workforce, vocationalization be very potent in developing learning communities and continue to be committed to develop efficiency in various forms of thought.

The availability of employment opportunities equally important part of the development of vocational education. Vocational education as an education for the world of work in filling the job opportunities that exist need to carry out the basic functions of vocational education, namely: (1) to transmit culture; (2) the transmission of skills/ abilities; (3) the transmission of values and beliefs; (4) preparation for a productive life; (5) fertilization group interaction; (6) the development of local wisdom and excellence.

Vocational education as education for developing job competence of human resources would work well if it is able to develop and the essence of human existence that is popular in the community through vocational education, cultural competence dimension in the order of life locally, nationally, regionally, and globally. As a

product of society, vocational education can not be separated from the society in which vocational education is developed. Vocational education grows out of society, culture and traditions evolved with the local community, pay attention to local knowledge, local advantages, the potential of the area, community support, participation and cooperation of the community, there is a strong consensus among people with vocational education institutions. Vision of vocational education should be congruent with the vision of a society where vocational education is developed [14, 15].

7. Conclusion

Vocational education is a unique and universal education. As a unique educational vocational education should be developed based on the needs, problems, expectations, and challenges society needs social efficiency exceeding expectations as John Dewey. Structuring and development of vocational education is still heavily influenced by mazab Prosser express their views so that the ability of solving problem using higher order thinking skills is not well developed in vocational schools. Furthermore, educational programs should be developed towards improving vocational skills and career skills life skills, strengthening education and training with a focus on learning the skills and intelligence to use creativity, critical thinking skills, communicate, and collaborate using media and information technology.

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